

**Young, John, NMENV**

**From:** Robert Beers [bbeers@lanl.gov]  
**Sent:** Monday, August 28, 2006 3:04 PM  
**To:** Vick, Chris, NMENV; Young, John, NMENV  
**Cc:** kmv@lanl.gov; saladen\_michael\_t@lanl.gov; dewart@lanl.gov; meverett@lanl.gov; sandovalt@lanl.gov; spears@lanl.gov; Victoria A. George  
**Subject:** NOI Coordination Request: R-17 Drilling/Development Water  
**Attachments:** NOI Fact Sheet\_R-17.xls; ATT8134316.txt

Dear Chris and John,

The Laboratory is storing approximately 17,000 gallons of drilling and development water in a lined pit at the R-17 drill site (Pajarito Canyon). The attached NOI Fact Sheet for R-17 provides a summary of the pertinent information, including the quality of the water in storage. The Laboratory requests your coordination in the land application of the R-17 pit water. Land application would be conducted at the R-17 drill site in accordance with the terms and conditions of the Hydrogeologic Workplan NOI dated August 7, 2002, and subsequently amended on November 4, 2004.

Samples collected directly from the pit show that the water in storage does not exceed any NM WQCC 3103 ground water standards or applicable RCRA regulatory limits.

- No VOA, PAHs, PCBs, or HE compounds were detected with the exception of acetone at 49.4 ppb. The source of the acetone is believed to be an artifact of the drilling additive, Quik-Foam.
- All metals, general inorganics (including NO<sub>3</sub>+NO<sub>2</sub>-N, CN, F, SO<sub>4</sub>, TDS, and Cl), and Ra-226/228 results were less than NM WQCC 3103 ground water standards.

No mixing of the pit water was conducted before sample collection on February 2, 2006. This sampling event occurred prior to the May 26, 2006, meeting with management and staff from the HWB and the GWQB regarding representative sampling of water stored in pits and tanks.

I have prepared a site map and copies of the analytical reports for your review. I will email these to you separately in order to avoid overwhelming your email server. I will provide you with hard copies of the above referenced information per your request.

Please do not hesitate to call me at 667-7969 if you have any questions.

Bob



3096

LANL TA-6 [Pajarito Canyon Ground Water]

# NOI Fact Sheet R-17

**Date:** 8/24/2006 **Well Type:** regional  
**Location (Canyon):** Pajarito Canyon **Location (TA):** 15  
**Static Water Level:** 1061.4 ft bgs **Alluvial Water?:** none (perched gw @ 850 ft bgs)  
**Volume in Storage:** 17,015 gal. (as of 6/12/06) **Type of Storage:** pit  
**Source of Water:** ground, potable, and decon water **Drilling Additives:** Quik Foam, EZ Mud, Defoamer  
**Location of Land Applic.** drill site **Method of Applic.** irrigation sprinklers

## Samples Collected

Sample Id	Collection Point	Date	Filtered (y/n)	Composite (y/n)
GW17-06-66412	pit	2/2/2006	y (metals only)	n
GW17-06-65834	pit	2/2/2006	n	n
GW17-06-73134	pit	8/11/2006	y	n

## Analytical Results/Detections

Sample Id	Suite	Analyte	Result	Comments
GW17-06-66412	VOA	Acetone	49.4 ppb	
GW17-06-66412	Metals		<3103 Stds	
GW17-06-66412	General Inorganics	CN, F, SO4, TDS, Cl	<3103 Stds	
GW17-06-66412	PAHs		U	
GW17-06-66412	PCBs		U	
GW17-06-66412	Rad	Ra-226/228	<3103 Stds	
GW17-06-65834	HE		U	
GW17-06-73134	General Inorganics	NO3+NO2-N	0.04 mg/L	

## Summary:

Analytical results from sampling of the water in the R-17 storage pit shows that it does not exceed any of the NM WQCC 3103 ground water standards or applicable RCRA regulatory limits. Acetone was detected in an unfiltered sample at a concentration of 49.4 ppb. The source of the acetone in the stored water is believed to be an artifact of the drilling additive, Quik-Foam.

A nitrate+nitrite (as N) sample was collected from the R-17 storage pit on August 11, 2006, and was analyzed by General Engineering Laboratories, Inc.

No mixing of the pit water was conducted prior to sample collection.